

T ECHNICAL INFORMATION



PRODUCT

P 1/7

Models No. ▶ AC310H

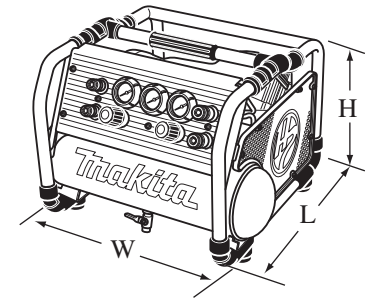
Description ▶ Air Compressor

CONCEPT AND MAIN APPLICATIONS

This model has been launched as Makita first HP (high pressure) air compressor. 1,500W high output motor generates maximum 2.58MPa air flow performance to exploit the full potential of HP pneumatic tools such as nailer, stapler, screwdriver and impact driver.

Four couplers are on the front. The two couplers are for HP pneumatic tools, the others are for RP (regular pressure) pneumatic tools.

Guard with seven bumpers is equipped to protect their couplers and body.



Dimensions: mm (")	
Length (L)	476 (18-3/4)
Width (W)	507 (20)
Height (H)	375 (14-3/4)

▶ Specification

Voltage (V)	Current (A)	Cycle (Hz)	Continuous Rating (W)		Max. Output (W)
			Input	Output	
120	13.0	60	---	875	1,500
220-240	7.0	50	1,800	875	1,500

Specifications	Model No.	AC310H
Max air pressure in Tank: Mpa (psi)		2.8 (410)
Air pressure in Tank when restarting: Mpa (psi)		2.3 (330)
Air pressure through Coupler: Mpa	for high pressure	0 ~ 2.58
	for regular pressure	0 ~ 0.91
Operating air pressure: MPa (psi)		0.98~2.26 (140 ~ 320)
Air flow performance: L/min at 0.75MPa		90
Motor	Horsepower: HP	2.5
	Type	4-pole induction motor
	RPM: min-1	1,700(60Hz) / 1,420(50Hz)
Rated amperage for North America: A		13
Continuous rating output: W		1,500
Noise: dB(A) tested according to outdoor noise directive		90
Motor thermal overload protector		Yes
Insulation		by grounding
Tank capacity		6.2 (1.6)
Power supply cord: m (ft)		1.8 (5.9)
Weight according to EPTA procedure: kg (lbs)		36 (79.4)

▶ Standard equipment

None of Standard equipment

Note: Standard equipment may vary by countries.

▶ Optional accessories

Carrying tool

Air hose assembly

Hose reel

► Repair

CAUTION: Repair the machine in accordance with “Instruction manual” or “Safety instructions”.

[1] NECESSARY REPAIRING TOOLS

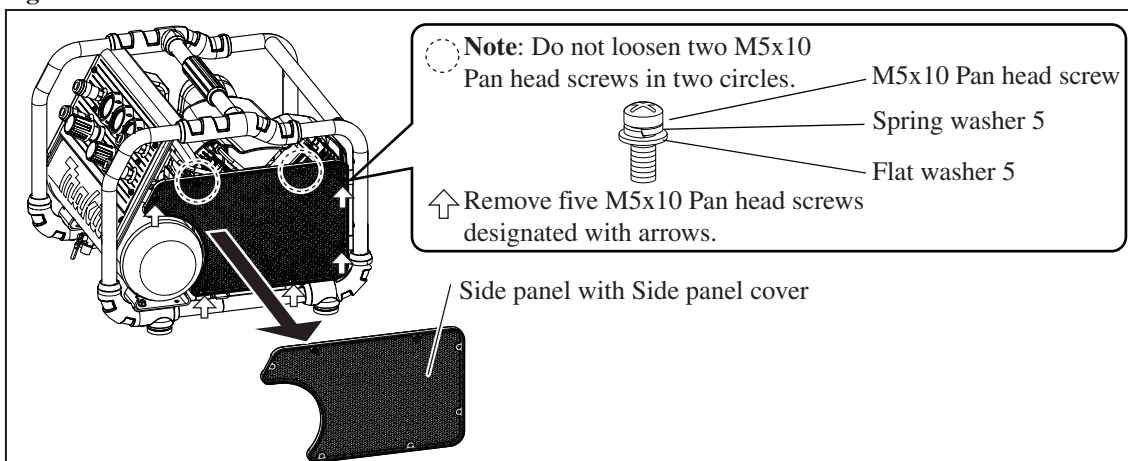
Code No.	Description	Use for
1R230	1/4" Hex. shank bit for M6	Removing M6 Hex socket head bolt
1R231	1/4" Hex. shank bit for M8	Removing M8 Hex socket head bolt

[2] REPLACING

[2]-1. Filter

1) Loosen five M5x10 Pan head screws, then remove Side panel with Side panel cover.

Fig. 1



2) Loosen three 4x18 Tapping screws, then remove Filter cover. (Fig. 2)

Filter can be removed as illustrated in Fig. 3.

Fig. 2

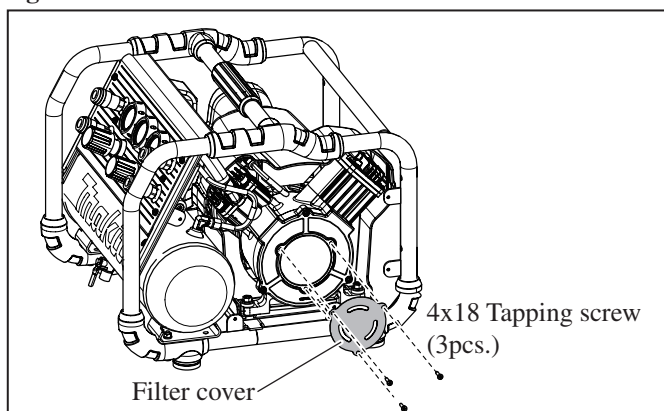
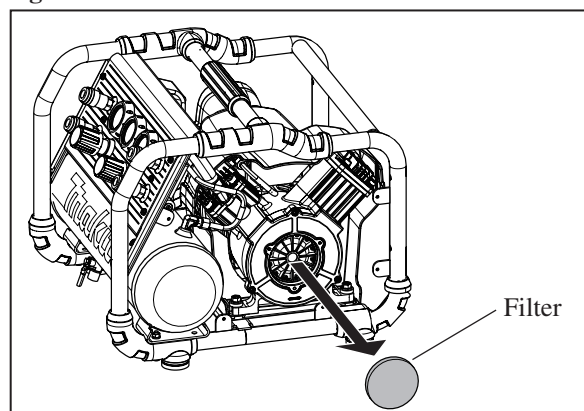


Fig. 3



[2]-2. Filter

After removing Side panel with Side panel cover, loosen Cover of Check valve section with box wrench 19. (Fig. 4)
Check valve can be removed. (Fig. 5)

Fig. 4

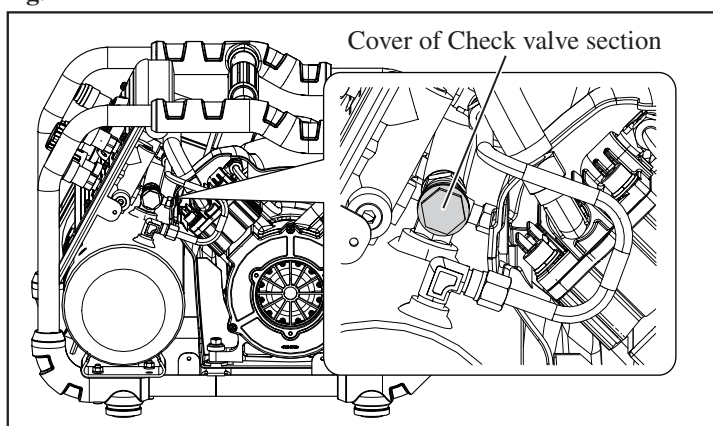
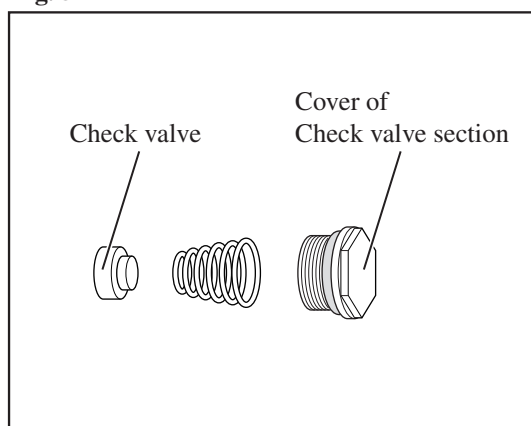


Fig. 5



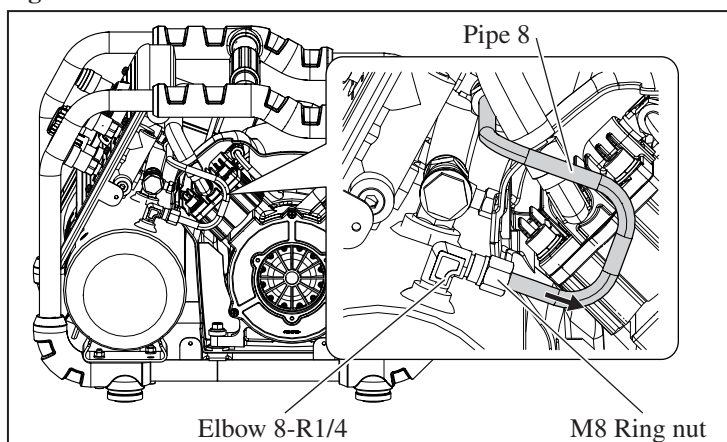
► Repair

[2] REPLACING

[2]-3. Unloading valve

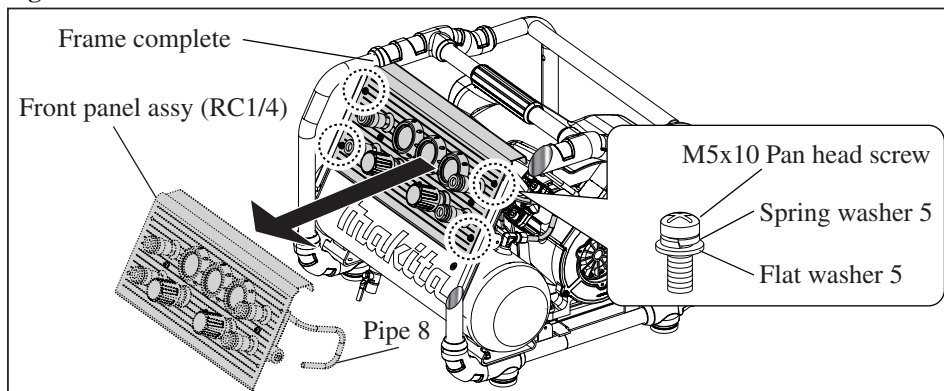
1) Loosen M8 Ring nut with Spanner 17, then remove Pipe 8 from Elbow 8-R1/4. (**Fig. 6**)

Fig. 6



2) Loosen four M5x10 Pan head screws, then remove Front panel assembly from Frame complete. (**Fig. 7**)

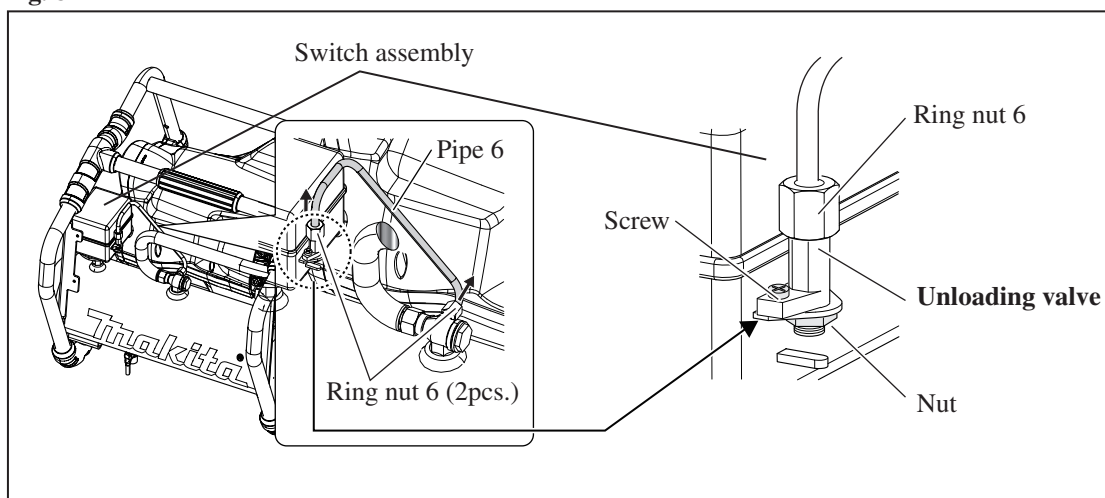
Fig. 7



3) Loosen two Ring nuts 6 with Spanner 13, then remove Pipe 6.

Loosen Screw and Nut (that are components of Switch assembly). Unloading valve can be removed. (**Fig. 8**)

Fig. 8



► Repair

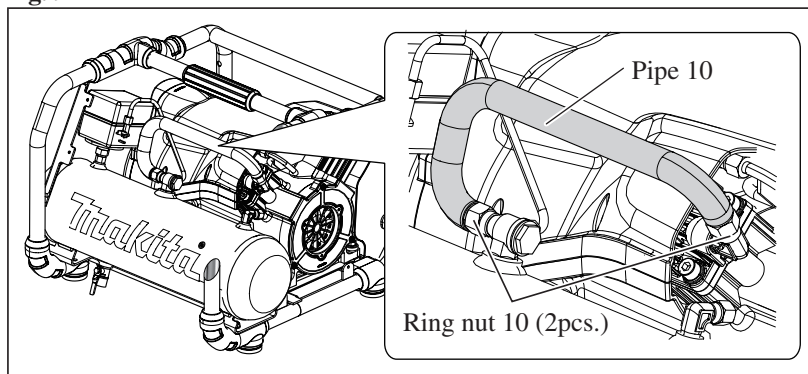
[2] REPLACING

[2]-4. Sheet ring H, Leaf spring H, Wearing H

DISASSEMBLING

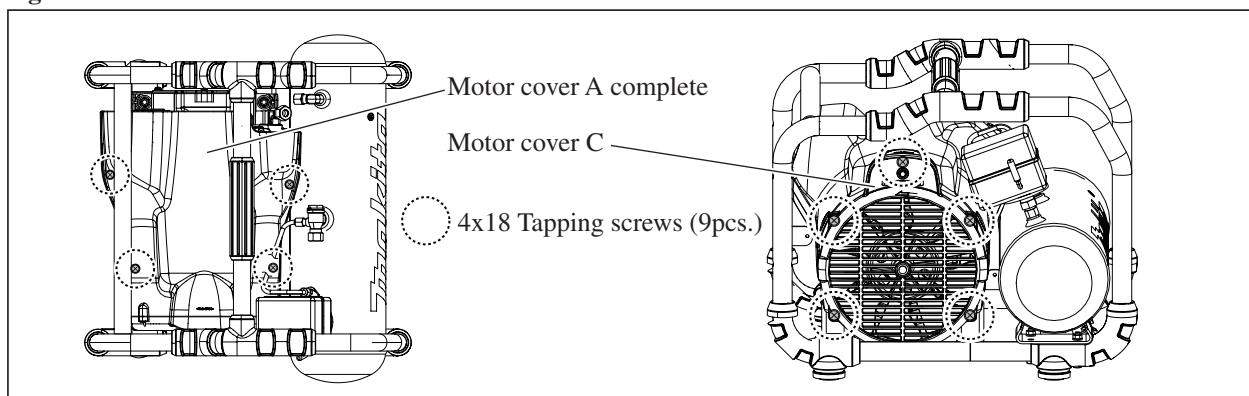
1) After removing Side panel with Side panel cover, loosen two Ring nut 10 and remove Pipe 10. (Fig. 9)

Fig. 9



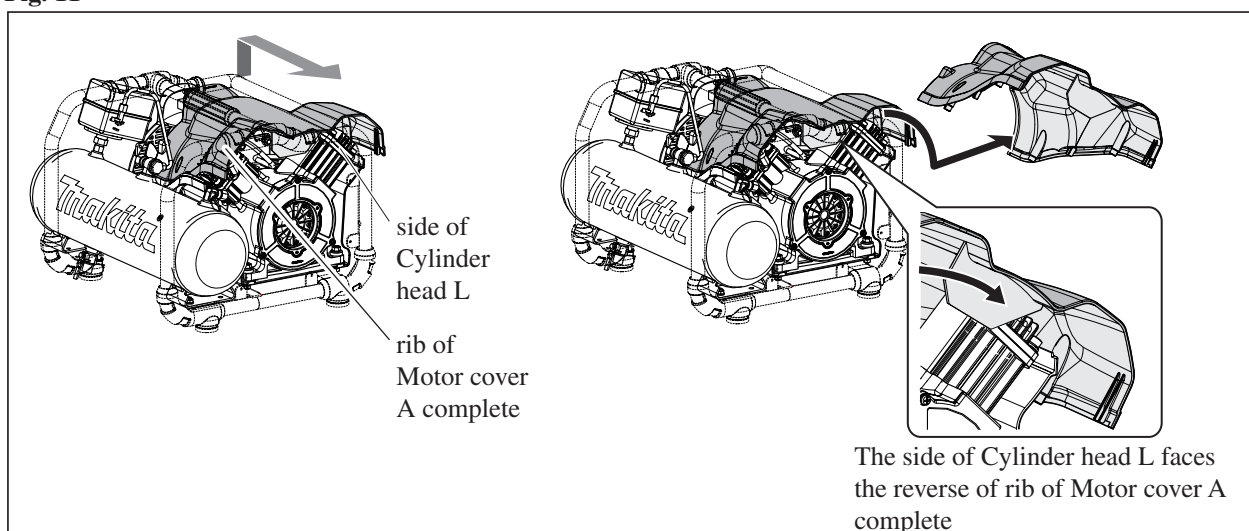
2) Loosen nine 4x18 Tapping screws, then separate Motor cover A complete from Motor cover C. (Fig. 10)

Fig. 10



3) Lift up and slide Motor cover A complete along gray arrow direction so that the side of Cylinder head L faces the reverse of rib of Motor cover A complete. Then remove Motor housing A complete by moving along black arrow direction. (Fig. 11)

Fig. 11



► Repair

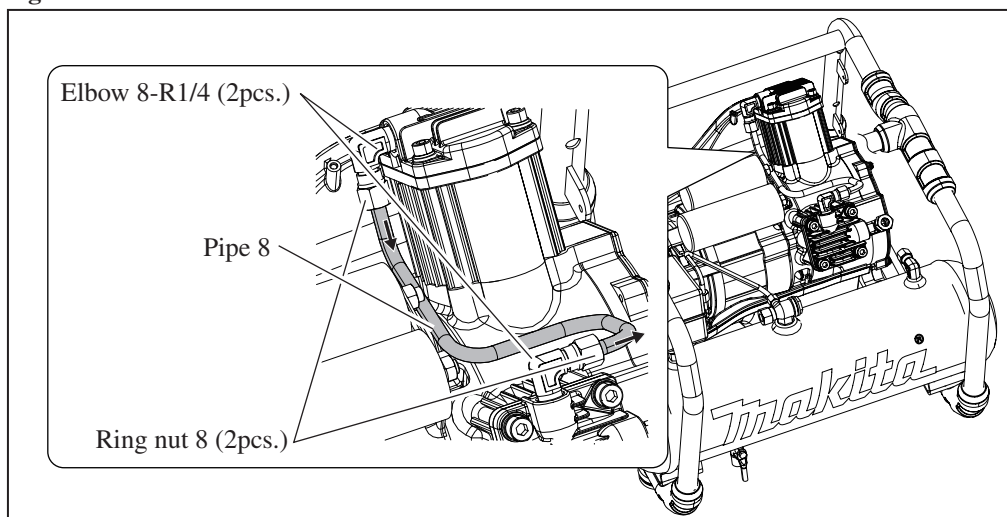
[2] REPLACING

[2]-4. Sheet ring H, Leaf spring H, Wearing H (cont.)

DISASSEMBLING

4) Loosen two Ring nuts 8 with Spanner 17, then remove Pipe 8 from two Elbows 8-R1/4. (Fig. 12)

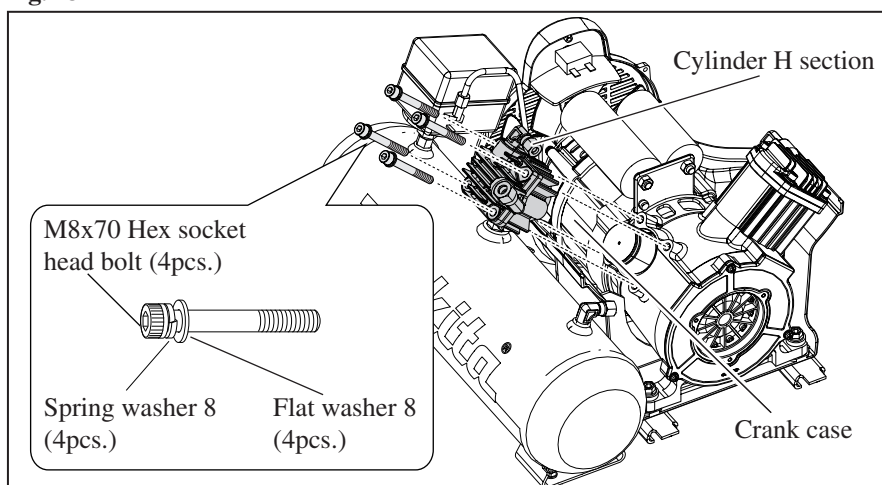
Fig. 12



5) Loosen four M8x70 Hex socket head bolts with Hex wrench 9, then remove Cylinder H section from Crank case. (Fig. 13)

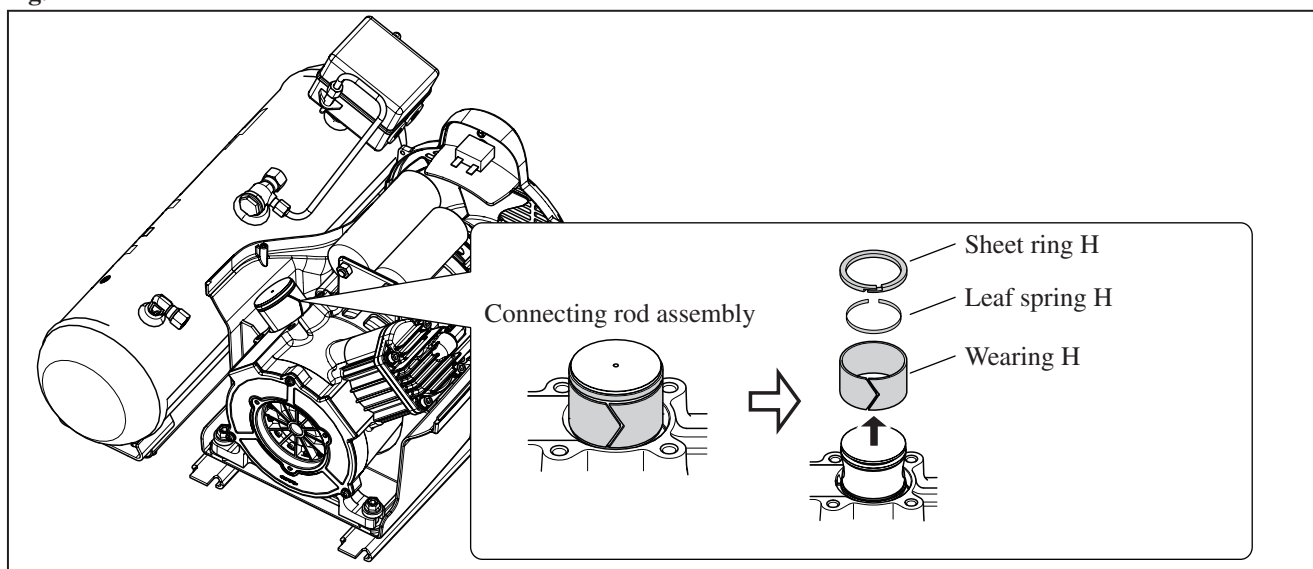
Note: When fastening Cylinder H section to Crank case, tighten M8x70 Hex socket head bolts to fastening torque 18 to 20 N.m.

Fig. 13



6) Disassemble Connecting rod H assembly. Sheet ring H, Leaf spring H and Wearing H can be replaced. (Fig. 14)

Fig. 14



► Repair

[2] REPLACING

[2]-4. Sheet ring H, Leaf spring H, Wearing H (cont.)

ASSEMBLING

- 1) Assemble Wearing H to Piston H. Wear ring H is not directional in assembling.
- 2) Insert Ring spring H in Sheet ring H so that the clearance of Ring spring H faces the opposite side against the clearance of Sheet ring H. (**Fig. 15**)
- 3) Enlarge a width of the assembled part of Sheet ring H and Ring spring H slightly and fit the assembled part into the groove of Piston H. (**Fig. 16**)
- 4) When Piston H of Connecting rod H assembly is at dead center upper point by turning Fan 195, assemble Cylinder H to Crank case.

Note: Piston H is not supplied individually. It is supplied as Connecting rod H assembly.

Fig. 15

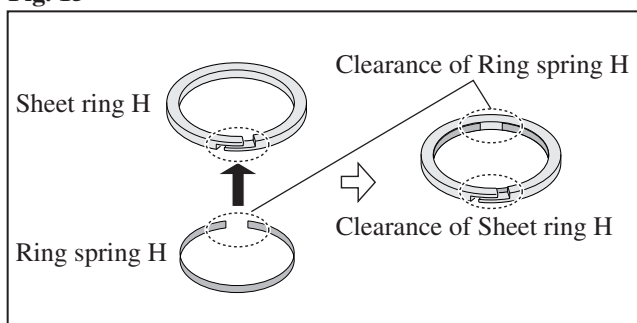
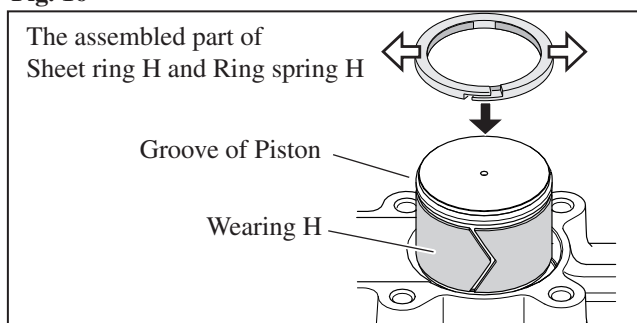


Fig. 16

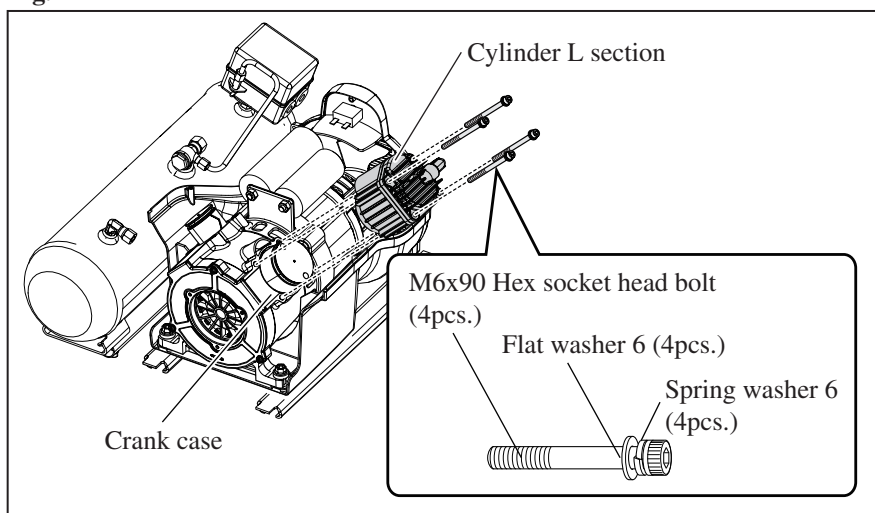


[2]-5. Sheet ring L, Leaf spring L, Wearing L

DISASSEMBLING

- 1) Remove Pipe 8 from two Elbows. (**Fig. 12**)
- 2) Loosen four M6x90 Hex socket head bolts with Hex wrench 5, and then remove Cylinder L section from Crank case. (**Fig. 17**)
- 3) Disassembling Connecting rod L assembly in the same manner mentioned for Connecting rod H assembly.

Fig. 17



ASSEMBLING

Take the disassembling step in reverse.

Note: 1) Tighten M6x90 Hex socket head bolt to the fastening torque 8 to 10 N.m.

2) Piston L is not supplied individually. It is supplied as Connecting rod L assembly.

▶ Wiring diaphragm

D-1

Note: Fix Lead wires in Motor cover with Band so as not to sag and interfere with Fan 195.

